Amendment dated January 24, 2007 Response to Final Office Action of November 24, 2006

Docket No. BOC9-2003-0085 (456)

Amendments to Claims:

This listing of claims will replace all prior versions and listings of claims in the instant application:

What is claimed is:

 (Currently Amended) A method of automatically resolving a Digital Subscriber Line (DSL) communication link failure comprising:

detecting a failure of the Digital Subscriber Line <u>DSL</u> communication link to a subscriber DSL modem;

<u>placing establishing</u> a <u>telephone</u> call over a public switched telephone network [[with]] <u>to</u> an administrative system <u>for the Digital Subscriber Line of the DSL service</u> provider in response to detecting the failure of the DSL communication link;

notifying the administrative system for the <u>DSL service provider</u> Digital Subscriber Line of the failure over <u>during</u> the <u>established telephone</u> call, whereby the administrative system causes the Digital Subscriber Line <u>DSL communication link</u> to be reset:

storing in a data store connected to the administrative system at least one of notification information received by the administrative system and information generated by the administrative system relating to a course of action implemented by the administrative system in response to the notifying step; and

sending a message informing a subscriber to the associated with the subscriber
DSL modem Digital Subscriber Line of when resumption restoration of the DSL
communication link to the subscriber DSL modem service over the Digital Subscriber
Line is expected, said message being sent by the administrative system for the Digital
Subscriber Line only after a predetermined amount of time has passed since notification
of the administrative system of the failure and the DSL communication link with the

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subscriber DSL modem has not been restored to verify that service over the Digital

Subscriber Line has not been restored to the subscriber.

2. (Currently Amended) The method of claim 1, said notifying step further

comprising requesting the reset of the Digital Subscriber Line DSL communication link.

3. (Currently Amended) The method of claim 1, further comprising the

administrative system identifying the Digital Subscriber Line DSL communication link

with the failure using caller identification on the received telephone call.

4. (Currently Amended) The method of claim 3, further comprising the

administrative system sending a reset message to a provider DSL modem within a Digital

 $\underline{\textbf{Subscriber-Line}}\ \underline{\textbf{DSL}}\ \underline{\textbf{operation center}},\ \underline{\textbf{wherein the}}\ \underline{\textbf{provider}}\ \underline{\textbf{DSL}}\ \underline{\textbf{modem is associated}}$

with the Digital Subscriber Line DSL communication link with the failure.

(Currently Amended) The method of claim 4, further comprising:

the administrative system establishing a telephone call with a subscriber endpoint associated with the Digital Subscriber Line DSL communication link with the failure; and

providing information relating to the <u>cause of the</u> failure of the Digital Subscriber Line DSL communication link to the subscriber endpoint over the established telephone

call

6. (Currently Amended) A system for automatically resolving a Digital

Subscriber Line (DSL) communication link failure comprising:

means for detecting a failure of the Digital Subscriber Line DSL communication

link to a subscriber DSL modem;

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means for <u>placing</u> establishing a <u>telephone</u> call over a public switched telephone network [[with]] to an administrative system for the <u>Digital Subscriber Line</u> of the <u>DSL</u>

service provider in response to detecting the failure of the DSL communication link;

means for notifying the administrative system for the DSL service provider Digital

Subscriber-Line of the failure over during the established telephone call, whereby the

administrative system causes the DSL communication link Digital Subscriber Line to be

reset;

means for storing in a data store connected to the administrative system at least

one of notification information received by the administrative system and information generated by the administrative system relating to a course of action implemented by the

administrative system in response to the notifying step; and

means for sending a message informing a subscriber associated with the subscriber

modem to the Digital Subscriber Line of when resumption restoration of the DSL

communication link to the subscriber DSL modem service over the Digital Subscriber

Line is expected, said message being sent by the administrative system for the Digital

 $\underline{\textbf{Subscriber Line}} \ \underline{\textbf{only}} \ \textbf{after a predetermined amount of time} \ \underline{\textbf{has passed since notification}}$

of the administrative system of the failure and the DSL communication link with the subscriber DSL modern has not been restored to verify that service over the Digital

audiction Dal modern has not occur restored to verry that service over the Dight

Subscriber Line has not been restored to the subscriber.

7. (Currently Amended) The system of claim 6, said means for notifying further

comprising means for requesting the reset of the Digital Subscriber Line DSL communications link.

communications link.

8. (Currently Amended) The system of claim 6, further comprising means for

the administrative system to identify the Digital Subscriber Line DSL communication

 $\underline{\text{link}}$ with the failure.

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 (Currently Amended) The system of claim 8, further comprising means for the administrative system to send a reset message to a <u>provider DSL</u> modem within a

Digital Subscriber Line DSL operation center, wherein the provider DSL modem is associated with the Digital Subscriber Line DSL communication link with the failure.

10. (Currently Amended) The system of claim 9, further comprising:

means for the administrative system to establish a telephone call with a subscriber

endpoint associated with the $\frac{\mbox{Digital-Subscriber-Line}}{\mbox{DSL communication link}}$ with the

failure; and

means for providing information relating to the failure of the DSL communication

link Digital Subscriber Line to the subscriber endpoint over the established telephone

call.

11. (Currently Amended) A machine readable storage, having stored thereon a

computer program having a plurality of code sections executable by a machine for

causing the machine to perform the steps of:

detecting a failure of a Digital Subscriber Line DSL communication link to a

subscriber DSL modem;

establishing a telephone call over a public switched telephone network with an

administrative system for the $\frac{\mbox{\sc Digital Subscriber-Line}}{\mbox{\sc DSL communication link with in}}$

response to detecting a failure of the DSL communication link;

notifying the administrative system for the DSL communication link Digital

Subscriber Line of the failure over the established telephone call, whereby the

administrative system causes the DSL communication link Digital Subscriber Line to be

reset;

storing in a data store connected to the administrative system at least one of

notification information received by the administrative system and information generated

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by the administrative system relating to a course of action implemented by the

administrative system in response to the notifying step; and

sending a message informing a subscriber associated with the subscriber DSL

modem to the Digital Subscriber Line of when restoration resumption of the DSL

communication link to the subscriber modem service over the Digital Subscriber Line is

expected, said message being sent by the administrative system for the Digital Subscriber

Line only after a predetermined amount of time has passed since notification of the

administrative system of the failure and the DSL communication link with the subscriber

DSL modem has not been restored to verify that service over the Digital Subscriber Line

has not been restored to the subscriber.

The machine readable storage of claim 11, said 12 (Currently Amended)

notifying step further comprising requesting the reset of the Digital Subscriber Line DSL

communication link.

The machine readable storage of claim 11, further 13. (Currently Amended)

comprising the administrative system identifying the Digital Subscriber Line DSL

communication link with the failure using caller identification on the received telephone

call.

The machine readable storage of claim 13, further 14 (Currently Amended)

comprising the administrative system sending a reset message to a provider DSL modem

within a Digital Subscriber Line DSL operation center, wherein the provider DSL modem

is associated with the Digital Subscriber Line DSL communication with the failure.

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15. (Currently Amended) The machine readable storage of claim 14, further comprising:

the administrative system establishing a telephone call with a subscriber endpoint associated with the Digital Subscriber Line DSL communication link with the failure; and providing information relating to the failure of the Digital Subscriber Line DSL communication link to the subscriber endpoint over the established telephone call.

- 16. (Cancelled)
- 17. (Cancelled)